**UNIVERSITY OF CAPE COAST**

**SCHOOL OF ECONOMICS**

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**DEPARTMENT OF DATA SCIENCE AND ECONOMIC POLICY**

**COURSE: DATA CURATION AND MANAGEMENT**

**COURSE TITLE: DMA820**

**LECTURER: DR RAYMOND ELIKPLIM KOFINTI**

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ASSIGNMENT QUESTIONS

(A.) Produce two pages commentary on Data Policy of your respective organizations covering the following areas:

1. Structure of Data Dissemination

2. Format of Data Dissemination

3. Data Sharing Protocols and Procedures if any

4. Data Visibility (Website/social media handles)

(B.) Suggest ways by which the mentioned areas of data curation can be improved/implemented in your organization.

**DATA CURATION AND MANAGEMENT REPORT OF AKOSOMBO VRA JHS NO. 2 SCHOOL**

This institution is a public basic school located in the Eastern Region of Ghana and it is committed to delivering quality basic education and is known for its disciplined academic environment and strong community engagement.

1. **COMMENTARY ON DATA POLICY** 
   1. Structure of Data Dissemination

At Akosombo VRA JHS No.2, the structure of data dissemination is centrally controlled and follows a defined hierarchy. Class teachers compile and submit student’s academic data including continuous assessments and exam scores to the academic office. This information is reviewed and authenticated by the academic board, then processed by the Computing department using fk software. The curated data is used to generate structured and individualized report cards. The students are given these reports in physical envelopes to deliver to their parents. While the process promotes consistency and accuracy, it still relies heavily on manual oversight and the physical delivery of printed reports. Additionally, the school operates a WhatsApp group to facilitate communication between parents and the administration. Lastly, the school has a Facebook page to support communication and disseminate general updates to parents and the wider community.

* 1. Format of Data Dissemination

Data is disseminated in Akosombo VRA JHS No.2 primarily in printed and structured report cards. Each report contains vital students’ information such as name, date of birth, student ID, class position, number on roll, BECE aggregate score, average termly score, subject-wise scores, class teacher’s remark, head teacher’s remark and signature accompanied by a student passport picture. FK Software streamlines the generation of consistently formatted report cards enhancing data reliability and comprehension. These printed reports are enclosed in envelopes and delivered to parents. While the school’s official Facebook page is actively used for general updates and community engagement, it does not serve as a platform for sharing academic records.

* 1. Data Sharing Protocols and Procedures

While the school adheres to responsible data sharing practices, there are currently no formal written policies or protocols. Only authorized staff, such as the headteacher, the academic board and the class teachers, access student data. However, the lack of a documented data policy means there are gaps in role definition, data privacy guidelines and long-term data retention procedures. This informal approach exposes the system to potential inconsistencies and data loss.

* 1. Data Visibility (Website/social media handles)

Data visibility at Akosombo VRA JHS No. 2 is modest and primarily analog. Parents access student reports mainly through printed copies delivered by hand. The school uses a WhatsApp group to communicate important notices and updates directly to parents, offering a faster and more interactive channel. Additionally, the school’s Facebook page plays a supportive role in enhancing community engagement by sharing announcements, event photos and achievements However, neither platform provides secure or personalized access to academic records. The lack of a dedicated school website or digital parent portal limits real-time access to student data, especially for parents who are remote or based outside Akosombo.

1. **As a data curation student, I recommend the following data curation practices;**
2. Leverage and Integrate Existing Communication Channels

To improve data dissemination, Akosombo VRA JHS No. 2 should adopt a hybrid reporting system that combines printed report cards with secure digital delivery via WhatsApp and email. Password-protected PDF reports can enhance timely access while reducing paper use. The school’s Facebook page can support this strategy by guiding parents to secure platforms for personalized academic information, without sharing sensitive data directly.

1. Improve Technological Infrastructure

To enhance data reliability and accessibility, Akosombo VRA JHS No. 2 should improveits technological infrastructure by introducing cloud-based backup systems and developing a school website with a secure parent portal. These upgrades will protect student records, support remote access, and enable real-time communication. Incorporating tools for data analysis can also aid in performance tracking and informed decision-making. Together, these improvements will modernize the school’s data management and align with best practices in data curation.

1. Develop a Comprehensive Data Policy Manual

To promote ethical and consistent data handling, the school should develop a Comprehensive Data Policy Manual. This document should define data access rights, parental consent procedures, record retention timelines and staff responsibilities. It will serve as a guideline for data governance, enhance accountability and ensure compliance with future educational data protection standards.

1. Introduce a Data Improvement Plan (DIP)

To improve data quality and usability, the school should implement a formal DIP. This involves assessing current data gaps, setting clear and measurable improvement goals, and tracking progress using performance indicators. The DIP should include stakeholder feedback and be regularly reviewed to ensure it remains effective. This approach will promote continuous improvement and more informed decision-making in the school’s data management.

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